



CLOUD-IO

Compact, modular and cybersecure automation platform for digital substations



4-IN-1 PLATFORM

RTU+PLC+GATEWAY
+REMOTE I/O

IEC 61850 READY

MULTI-PROTOCOL
INTEROPERABILITY

MODULAR DESIGN

DIN-RAIL EXPANSION
MODULES

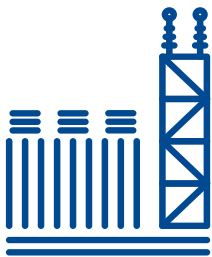
CYBERSECURE

ADVANCED SECURITY
FEATURES

MADE IN FRANCE

DESIGNED & PRODUCED
IN NANTES

SUBSTATIONS SOLUTION



CLOUD-IO is Omexom's programmable automation platform for high-voltage substations. Built in Nantes, France, it combines gateway, RTU, PLC, and remote I/O functions in one compact, modular solution, enabling utilities to collect and leverage operational data while supporting remote control, monitoring, and automation of critical grid assets. With strong computing power, multi-protocol connectivity, and built-in cybersecurity, it's a scalable, future-ready solution for digital substations and grid modernization.



THE CHALLENGE

- Substations generate growing volumes of data that must be efficiently collected and used
- Utilities need compact, flexible automation for complex substation environments
- Legacy equipment often lacks modern monitoring and remote-control capabilities
- Digital substations need secure, cybersecurity-by-design architectures



KEY BENEFITS

- Dedicated solution for HV substations
- Unified platform for control, connectivity and I/O
- Compact, modular and easy to deploy
- Supports IEC 61850, IEC 60870-5-104, Modbus and MQTT
- Integrated web-based HMI and automation
- Advanced cybersecurity with secure remote access

THE SOLUTION THE CLOUD-IO APPROACH

Connect → Monitor → Control → Optimize

All-in-One Automation Platform

A programmable automation system combining gateway, RTU, PLC and remote I/O functions for substation monitoring and control.

Multi-Protocol Connectivity

Supports IEC 61850 MMS & GOOSE, IEC 60870-5-104, Modbus TCP/RTU and MQTT for seamless integration with existing systems.

Modular Architecture

DIN-rail-mounted design with expandable digital and analog I/O modules, Ethernet extensions and dedicated LV breaker management modules.

Cybersecurity by Design

Secure web access, encrypted communications, Syslog, SNMPv3, TLS protection and role-based authentication help protect critical infrastructure.



TYPICAL USE CASE: Remote-control gateway for substations | Remote I/O for control cabinets and electrical enclosures | Monitoring and control of low-voltage breakers | Transformer and equipment monitoring | Integration of legacy assets into modern digital networks

OMEXOM

For any questions regarding this solution, please contact:

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